

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addease COMMISSIONER FOR PATENTS PO Box 1430 Alexandra, Virginia 22313-1450 www.webjo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,867	09/22/2005	Clifford J. Steer	110.01990101	4764
26813 MUETING, RAASCH & GEBHARDT, P.A. P.O. BOX 581336 MINNEAPOLIS, MN 55458-1336			EXAMINER	
			AFREMOVA, VERA	
			ART UNIT	PAPER NUMBER
			MAIL DATE	DELIVERY MODE
			12/26/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/549 867 STEER ET AL. Office Action Summary Examiner Art Unit Vera Afremova 1657 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 18 September 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)\ Claim(s) 1-17, 23-30, 33-41, 44-47, 51-53 and 66-80 is/are pending in the application. 4a) Of the above claim(s) 5.6.9-14.23-30.33-41.44-47.51-53.69-76.79 and 80 is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-4,7,8,15-17,66-68,77 and 78 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date \_\_\_ Notice of Draftsperson's Patent Drawing Review (PTO-948). 5) Notice of Informal Patent Application Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date 12/10/2008

6) Other:

Art Unit: 1657

#### DETAILED ACTION

Claims 1-17, 23-30, 33-41 and 44-47, 51-53, 66-74 as amended and new claims 75-80 (9/18/2008) are presently pending.

Claims 18-22, 31, 32, 42, 43 and 54-65 were canceled by applicants.

Claims 5, 6, 9-14, 23-30, 33-41, 44-47, 51-53 and 69-74 were/remain withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected invention(s) drawn to *in vivo* administration and treatment of patients with hydrophilic bile acids and cells.

Newly submitted claims 75, 76, 79 and 80 are drawn to *in vivo* administration and treatment of patients with cells and hydrophilic bile acids (UDSA and its analogs) and, thus, they are directed to an invention that is independent or distinct from the invention that was originally presented, elected by applicant and examined on the merits. Accordingly, claims 75, 76, 79 and 80 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 1-4, 7-8, 15-19, 66-68 as amended and new claims 77 and 78 as solely drawn to an *in vitro* method of making a transplant cell population and promoting its viability by *in vitro* treatment of cells with ursodeoxycholic acid (UDCA) or its analog are under examination in the instant office action.

This application contains claims 5, 6, 9-14, 23-30, 33-41, 44-47, 51-53, 69-76, 79 and 80 drawn to an invention(s) nonelected with traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### Claim Rejections - 35 USC § 112

Claims 1-4, 7-8, 15-19, 66-68 as amended and new claims 77 and 78 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The amended claims (claim 1, for example) are rendered indefinite by recitation of "dopamine neurons or precursors thereof" in the lack of clear definitions about meaning and characterization of "dopamine neurons" and, in particular, about "differentiated dopamine neurons" (instant claim 2) and "precursors thereof" (instant claim 3).

Although it appears that "dopamine neurons" as disclosed in exemplified disclosure would be same and/or made from rat embryonic ventral mesencephalic tissue (page 18, line 226, for example), it still remain unclear what is structural and material relationship as intended for claimed invention between the "dopamine neurons" of the embryonic ventral mesencephalic as disclosed in as-filed specification and the "pluripotent stem cell, embryonic stem cells and adult stem cells and combination thereof" of amended claim 3, as well as "differentiated dopamine neurons" of amended claim 2.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1657

Claims 1-4, 7, 8, 15-17, 66 and 67 as amended and new 77 and 78 remain/are rejected under 35 U.S.C. 102(b) as being anticipated by Rodrigues et al. (IDS reference; "Tauroursodeoxycholic acid partially prevents apoptosis induced by 3-nitropropionate acid:

evidence for mitochondrial pathway independent of the permeability transition". Journal of Neurochemistry. 2000, Vol. 75, pages 2368-2379).

Claims are directed to a method of making a transplant cell population and promoting its viability wherein the method comprises one active step of *in vitro* treatment of cells with ursodeoxycholic acid (UDCA) or its salts or its analog wherein the cells are dopamine neurons or precursors thereof. Some claims are further drawn to the cells being differentiated or precursor cells; to the cells being autologous, heterologous or xenologous tissues. Some claims are further drawn to contacting the cells with UDCA or its analog in combination with pharmaceutically acceptable carrier. Some claims are further drawn to contacting the cells with the UDCA analog such as tauroursodeoxycholic acid (TUDCA). Some claims are further drawn to cells being embryonic ventral mesencephalic cells.

The reference by Rodrigues et al teaches that TUDCA prevents apoptosis in of cells such as neuronal cells. The cited reference discloses a method for making cells suitable for transplant and for promoting their viability wherein the method comprises one active step of *in vitro* treatment of neuronal cells with TUDCA (entire document including abstract, page 2369, col. 2, paragraph 3; Fig. 1; Fig. 7; etc.). The disclosed rat neuronal cell populations RN33B contain both differentiated and precursors cells in light of disclosure about further neuronal differentiation (page 2369, col. 2, par. 3, line 11). The compound TUDCA is dissolved in the cell culture medium and, thus, in combination with a pharmaceutically acceptable carrier. Therefore, the

Art Unit: 1657

cited method comprises identical active step and identical structural elements as required by the claimed method and, thus, the cited reference anticipates the claimed invention. With respect to claim 7 and 8 it is noted that the claimed limitations are solely drawn to intended use.

In particular, in the method of the reference of Rodrigues et al, the neurons are rat neuronal cells RN33B (page 2369, col.2, par. 3). Although the reference by Rodrigues is silent about characterization of neuronal cells RNB33, the prior art evidences (abstract of Onifer et al.) that RNB33 are neuronal progenitor cells derived from embryonic rat raphe nuclei or from midbrain section (mesencephalon) and, thus, they appear to be the same cells as required by the presently claimed invention at the very least with regard to "precursors cells" that are "embryonic stem cells" within the broadest meaning of claim 3 and in the lack of clear and proper definitions in the as-filed specification and also with regard to cells derived from embryonic mesencephalon within the meaning of new claims 77 and 78. The reference of Rodrigues et al. discloses that culturing of RNB33 cells promoted neuronal differentiation (page 2369, col.2, par. 3) and, thus, the cultured RNB33 cells provide for differentiated cell population of neurons including "dopamine neurons" in the method of in vitro culturing the cells in the presence of UDCA or its analogs (for example: fig. 1 of Rodrigues et al.) within the broadest meaning of the instant claims. Thus, the cited reference by Rodrigues et al. anticipates the claimed invention.

Claims 1-4, 7, 8, 15-17, 66 and 67 as amended and new 77 and 78 remain/are rejected under 35 U.S.C. 102(b) as being anticipated by Silva et al. ("Bilirubin induced apoptosis in rat

Art Unit: 1657

cultured neural cells is aggravated by chenodeoxycholic acid but prevented by ursodeoxycholic acid". Journal of Hepatology, 2001, Vol. 34, pages 402-408).

Claims are directed to a method of making a transplant cell population and promoting its viability wherein the method comprises one active step of *in vitro* treatment of cells with ursodeoxycholic acid (UDCA) or its salts or its analog wherein the cells are dopamine neurons or precursors thereof. Some claims are further drawn to the cells being differentiated or precursor cells; to the cells being autologous, heterologous or xenologous tissues. Some claims are further drawn to contacting the cells with UDCA or its analog in combination with pharmaceutically acceptable carrier. Some claims are further drawn to contacting the cells with the UDCA analog such as tauroursodeoxycholic acid (TUDCA). Some claims are further drawn to cells being embryonic ventral mesencephalic cells.

The reference by Silva et al teaches that UDCA and its conjugated derivative TUDCA prevents cell death of neuronal cells. The cited reference discloses a method for making cells suitable for transplant and for promoting their viability wherein the method comprises one active step of *in vitro* treatment of neuronal cells with UDCA and TUDCA (entire document including abstract; page 403, col. 2, par. 2; Fig. 4; page 406, col. 1, lines 6-9; etc.). The disclosed rat neuronal cell populations were isolated from embryonic tissue (page 403, col. 2, par. 2) and, thus, contain both differentiated and precursors cells within the broadest meaning of the instant claims and when read in the in light of instant specification (page 18, line 27-28). The compounds UDCA and TUDCA are dissolved in the cell culture medium and, thus, in combination with a pharmaceutically acceptable carrier. Therefore, the cited method comprises

Art Unit: 1657

identical active step and identical structural elements as required by the claimed method and, thus, the cited reference anticipates the claimed invention.

In particular, in the method of the reference of Siva the suspension of neuronal cells is made from rat embryonic whole brain after removal of meninges (system of membranes enveloping nervous tissues) and white matter (mostly lipid), for example: see at page 403, col. 2, par. 2; and, thus, the suspension of neuronal cells comprises brain ventral mesencephalic cells that are required by the newly added claims 77 and 78. The ventral mesencephalic cells in the cited cell suspension would be "dopamine neurons" as encompassed by the instant claims (claim 1) and in the light of as-filed specification (page 18, line 26). The cited neuronal cells derived from embryonic brain tissues and, thus, they appear to be the same cells as required by the presently claimed invention at the very least with regard to "precursors cells" that are "embryonic stem cells" within the broadest meaning of claim 3 and in the lack of clear and proper definitions in the as-filed specification. The reference of Silva discloses that culturing the cells promote apoptosis (final differentiation) and, thus, the cultured neurons cells provide for differentiated cell population of neurons in the method of in vitro culturing the cells in the presence of UDCA or its analogs (for example: fig. 4 of Silva) within the broadest meaning of the instant claims and in the lack of evidence to the contrary. Thus, the cited reference by Silva et al. anticipates the claimed invention.

Claims 1-4, 7, 8, 15-17, 66 and 67 as amended and new 77 and 78 are rejected under 35

U.S.C. 102(b) as being anticipated by Duan W.M. ("Protective role of tauroursodeoxyycholic acid on donamine neurons from MPTP neurotoxicity". Society for Neuroscience Abstracts. 2001.

Art Unit: 1657

Vol. 29, page 1245) or by Duan et al. ("Tauroursodeoxycholic acid improves the survival and function of nigral transplants in a rat model of Parkinson's disease". Cell Transplantation. 2002, vol. 11, pages 195-205).

Claims are directed to a method of making a transplant cell population and promoting its viability wherein the method comprises one active step of *in vitro* treatment of cells with ursodeoxycholic acid (UDCA) or its salts or its analog wherein the cells are dopamine neurons or precursors thereof. Some claims are further drawn to the cells being differentiated or precursor cells; to the cells being autologous, heterologous or xenologous tissues. Some claims are further drawn to contacting the cells with UDCA or its analog in combination with pharmaceutically acceptable carrier. Some claims are further drawn to contacting the cells with the UDCA analog such as tauroursodeoxycholic acid (TUDCA). Some claims are further drawn to cells being embryonic ventral mesencephalic cells.

The reference by Duan discloses a method of promoting viability of dopamine neurons wherein the method comprises one active step of *in vitro* treatment of the dopamine neurons cells with tauroursodeoxycholic acid (TUDCA) wherein the dopamine neurons are prepared from ventral mesencephalon of rats (abstract). The reference teaches that TUDCA prevent dopamine neurons from cell death. Thus, the cited reference by Duan anticipates the claimed invention.

The reference by Duan et al. discloses a method of promoting viability of dopamine neurons wherein the method comprises one active step of *in vitro* treatment of the dopamine neurons cells with tauroursodeoxycholic acid (TUDCA) wherein the dopamine neurons are prepared from ventral mesencephalon of rats (entire document including abstract). The reference

Art Unit: 1657

teaches that TUDCA prevent dopamine neurons from cell death. Thus, the cited reference by Duan et al. anticipates the claimed invention.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7, 8, 15-17, 66-68 as amended and new 77 and 78 are rejected under 35

U.S.C. 103(a) as being unpatentable over Falasca et al. (IDS reference; "Protective role of tauroursodeoxycholate during harvesting and cold storage of human liver". Transplantation. May 2001, Vol. 71, No. 9, pages 1268-1276), Duan et al. ("Tauroursodeoxycholic acid improves the survival and function of nigral transplants in a rat model of Parkinson's disease". Cell Transplantation. 2002, vol. 11, pages 195-205), Rodrigues et al. (IDS reference; "Tauroursodeoxycholic acid partially prevents apoptosis induced by 3-nitropropionate acid: evidence for mitochondrial pathway independent of the permeability transition". Journal of Neurochemistry. 2000, Vol. 75, pages 2368-2379), Silva et al. ("Bilirubin induced apoptosis in rat cultured neural cells is aggravated by chenodeoxycholic acid but prevented by ursodeoxycholic acid". Journal of Hepatology. 2001, Vol. 34, pages 402-408) and Duan W.M. ("Protective role of tauroursodeoxyycholic acid on dopamine neurons from MPTP neurotoxicity". Society for Neuroscience Abstracts, 2001, Vol. 29, page 1245)

Art Unit: 1657

Claims are directed to a method of making a transplant cell population and promoting its viability wherein the method comprises one active step of *in vitro* treatment of cells with ursodeoxycholic acid (UDCA) or its salts or its analog wherein the cells are dopamine neurons or precursors thereof. Some claims are further drawn to the cells being differentiated or precursor cells; to the cells being autologous, heterologous or xenologous tissues. Some claims are further drawn to contacting the cells with UDCA or its analog in combination with pharmaceutically acceptable carrier. Some claims are further drawn to contacting the cells with the UDCA analog such as tauroursodeoxycholic acid (TUDCA). Some claims are further drawn to cells being embryonic ventral mesencephalic cells.

Some claims (amended claim 68) are further drawn to the cells being human cells.

The reference by Falasca et al. teaches a protective role of tauroursodeoxycholate (TUDCA which is UDCA analog) during harvesting and cold storage of human tissue as intended for transplantation. In particular, the tissue is liver cells. But other cited references by Rodrigues et al., Silva et al., Duan and Duan et al. clearly teach the protective role of UDCA and its analog as applied to mammalian neuronal cells including protective role of UDCA on dopamine neurons that are used for transplantation.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the claimed invention was to use UDCA and/or TUDCA for in vitro treatment of various mammalian cells including human neuronal cells with a reasonable expectation of success in making transplant cell populations and promoting their viability because the prior art teaches and suggests protective role of UDCA and TUDCA for various mammalian cells including human

Art Unit: 1657

and rat cells. Thus, the claimed invention as a whole was clearly prima facie obvious, especially in the absence of evidence to the contrary.

The claimed subject matter fails to patentably distinguish over the state art as represented be the cited references. Therefore, the claims are properly rejected under 35 USC § 103.

#### Response to Arguments

Applicant's arguments filed 9/18/2008 have been fully considered but they are not persuasive.

Election/Restriction: With regard to restriction requirement applicants argue that restriction between method of *in vitro* cell culturing and method of *in vivo* administration of cell populations is improper because steps of in vivo administration of the cell product(s) are additional limitations. These arguments are not found persuasive because this application a 371 type of application and the scope of pending claims is drawn to more than one of permissible combinations of invention categories such as more than one of methods of using the hydrophilic bile acids or ursodeoxycholic acid (UDCA) and its analogs for treating cells and for treating various patients as explained in the prior office action(s). The corresponding special technical features such as the use of UDCA for treating cell populations and for administration to patients are known in the prior art. For example: see abstract of the reference by Rodrigues et al. (IDS reference; Journal of Clinical Investigation. June 1998. Vol. 101, No. 12, pages 2790-2799) that teaches the use of hydrophilic bile acid compounds including UDCA for treating liver cells and for administration to prevent cell apoptosis and cell alterations. Thus, unity of inventions is lacking. See MPEP 1850. 37 CFR 1.475.

Art Unit: 1657

Claim rejection rejected under 35 U.S.C. 102(b) as being anticipated by Falasca et al. (IDS reference; "Protective role of tauroursodeoxycholate during harvesting and cold storage of human liver". Transplantation. May 2001, Vol. 71, No. 9, pages 1268-1276) has been withdrawn because the claims as amended are not longer directed to culturing liver cells.

With regard to claim rejection under 35 U.S.C. 102(b) as being anticipated by Rodrigues et al. (IDS reference; "Tauroursodeoxycholic acid partially prevents apoptosis induced by 3nitropropionate acid: evidence for mitochondrial pathway independent of the permeability transition". Journal of Neurochemistry, 2000, Vol. 75, pages 2368-2379) applicants appear to argue that that cited reference does not teach cell population of "dopamine neurons and precursors thereof' (response page 12). Yet, the instant specification does not provide definitions what are "dopamine neurons and precursors thereof" as intended. The instant arguments do not point out what distinguish the cited neuronal cells from the "dopamine neurons and precursors thereof" as intended for the claimed invention. In the method of the reference of Rodrigues et al. the neurons are rat neuronal cells RN33B (page 2369, col.2, par. 3). Although the reference by Rodrigues is silent about characterization of cells RNB33, the prior art evidences (abstract of Onifer et al.) that RNB33 are neuronal progenitor cells derived from embryonic rat midbrain section and, thus, they appear to be the same cells as required by the presently claimed invention at the very least with regard to "precursors cells" that are "embryonic stem cells" within the broadest meaning of claim 3 and in the lack of clear and proper definitions in the as-filed specification. The reference of Rodrigues et al. discloses that culturing of RNB33 cells promoted neuronal differentiation (page 2369, col.2, par. 3) and, thus, the cultured RNB33 cells provide for differentiated cell population of neurons including "dopamine neurons" in the method of in vitro

Art Unit: 1657

culturing the cells in the presence of UDCA or its analogs (for example: fig. 1 of Rodrigues) within the broadest meaning of the instant claims and in the lack of evidence to the contrary.

With regard to the claim rejection under 35 U.S.C. 102(b) as being anticipated by Silva et al. ("Bilirubin induced apoptosis in rat cultured neural cells is aggravated by chenodeoxycholic acid but prevented by ursodeoxycholic acid". Journal of Hepatology. 2001, Vol. 34, pages 402-408) applicants appear to argue that that cited reference does not teach cell population of "dopamine neurons and precursors thereof" (response page 12). Yet, the instant specification does not provide definitions what are "dopamine neurons and precursors thereof" as intended. The instant arguments do not point out what distinguish the cited neuronal cells from the "dopamine neurons and precursors thereof" as intended for the claimed invention. In the method of the reference of Siva the suspension of neuronal cells is made from rat embryonic whole brain after removal of meninges (system of membranes enveloping nervous tissues) and white matter (mostly lipid), for example: see at page 403, col. 2, par. 2; and, thus, the suspension of neuronal cells comprises brain ventral mesencephalic cells that are required by the newly added claims 77 and 78. The ventral mesencephalic cells in the cited cell suspension would be "dopamine neurons" as encompassed by the instant claims (claim 1) and in the light of as-filed specification (page 18, line 26). The cited neuronal cells derived from embryonic brain tissues and, thus, they appear to be the same cells as required by the presently claimed invention at the very least with regard to "precursors cells" that are "embryonic stem cells" within the broadest meaning of claim 3 and in the lack of clear and proper definitions in the as-filed specification. The reference of Silva discloses that culturing the cells promote apoptosis (final differentiation) and, thus, the cultured neurons cells provide for differentiated cell population of neurons in the

Art Unit: 1657

method of in vitro culturing the cells in the presence of UDCA or its analogs (for example: fig. 4 of Silva) within the broadest meaning of the instant claims and in the lack of evidence to the contrary.

With regard to claim rejection under 35 USC § 103 applicants argue that the combination of references is improper. However, the cited references are in the same field of endeavor (such the use of UDCA and its analogs for in promoting cell viability *in vitro*) and they seek to solve the same problems as the instant application and claims (such as protection of mammalian cells from apoptosis as intended for further transplantation), and one of skill in the art is free to select components available in the prior art, *In re* Winslow, 151 USPQ 48 (CCPA, 1966).

No claims are allowed.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1657

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vera Afremova whose telephone number is (571) 272-0914. The examiner can normally be reached from Monday to Friday from 9.30 am to 6.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon P. Weber, can be reached at (571) 272-0925.

The fax phone number for the TC 1600 where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 1600, telephone number is (571) 272-1600.

Vera Afremova

AU 1657

December 19, 2008

VERA AFREMOVA

PRIMARY EXAMINER

/Vera Afremova/

Primary Examiner, Art Unit 1657